## Data Dictionary and Notes Nez Perce Tribe and Shoshone-Bannock Tribes Fish Consumption Survey, 2014-2015

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The document describes the dataset released as part of the Nez Perce Tribe and Shoshone-Bannock Tribes fish consumption survey draft final report (dated July 15<sup>th</sup>). The survey was conducted in Idaho during 2014 and 2015. The dataset includes basic demographic information of respondents, annual fish consumption rates based on a food frequency questionnaire (FFQ) and two 24-hour fish consumption recall interviews. Demographic information was restricted to protect identities of respondents. This includes grouping age and body weight. All respondents who were fish consumers and who completed the FFQ interview and had a calculable annual consumption rate are included in this data set. The data were analyzed and the results were presented in the draft final report. Not all variables used in that report are included in this dataset, but an extended dataset will be released with the final report. The draft final report or the final report will be needed in conjunction with the data dictionary and the dataset in order to properly understand and analyze the data.

The tribal members were randomly sampled according to a stratified sampling scheme described in the report. Each respondent has a survey weight which has been adjusted for non-response. Users must apply these survey weights to calculate unbiased estimates of population parameters such as mean consumption rates, consumption rate percentiles, etc. At the end of the data file are 1,000 bootstrap replicate weights, which were used to compute the confidence intervals in the report.

There are two versions of the survey weights provided. The first version (survey\_wt1 and rep\_wt1\_XXX) was used for the FFQ rates and summaries of demographics presented in the report and should be used for any new analyses not represented in the report. Due to software versioning issues, a slightly modified version of these weights (survey\_wt2 and rep\_wt2\_XXX) was used for the NCI method analysis presented in the report. These weights should only be used if the user is attempting to reproduce NCI method results in the report. The two versions of weights are very similar and will result in very similar estimates, but use of the first version is preferable (survey\_wt1 and rep\_wt1\_XXX).

Table 3 describes all variables included in the released data set. Consumption rates are provided for the species groups 1 through 7 presented in the report (see Table 1 here) as well as for each of

the 45 individual species and groups listed in the questionnaire (Table 2)<sup>1</sup>. When replying to question in the FFQ, respondents provided information on consumption at special events and gatherings, and, separately, consumption outside of special events and gatherings. For consumption at special events, respondents reported consumption of four species groups only: salmon and steelhead combined, resident trout, sturgeon, and suckers and whitefish combined. Some variables in the dataset include "EVENT" and "NONEVENT" in their names to indicate which variables refer to consumption at special events and which refer to consumption outside of special events.

For the July 15, 2015, draft final report, data from the two 24-hour recall interviews were analyzed using the NCI method to produce means and percentiles of fish consumption rates (g/day). Refer to the draft final report for the methodology used for the NCI method analysis. Note that the data from both the Shoshone-Bannock Tribes and the Nez Perce Tribe need to be combined in order to implement the NCI method as described in the report.

In order to prevent identification of individual survey respondents, the variable describing zip code group has not been included in this data release. The zip code group was included in the analysis based on the NCI method presented in the draft final report, but this zip code variable had only a small impact on the means and percentiles reported. The user of the datasets can carry out the NCI method analysis to derive means and percentiles of fish consumption, and those values will be quite similar to the corresponding values included in the draft final report.

All variables included in the datasets are from or have been derived from the answers to the survey questions except for a few demographic variables that are based on data from the enrollment files of each of the Tribes.

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<sup>&</sup>lt;sup>1</sup> The questionnaire appears in Appendix A of the draft final report.

Table 1. Definitions of main species groups presented in the draft final report.

| Species<br>Group | Description  | Species and Groups Included   |
|------------------|--|---|
| Group 1          | All finfish and shellfish                          | Combination of Groups 3, 4, 5, 6 and 7  |
| Group 2          | Near coastal, estuarine, freshwater and anadromous | All species in Groups 3, 4 and 5 as well as lobster, crab, shrimp, marine clams or mussels, octopus* and scallops*  |
| Group 3          | Salmon or steelhead                                | Chinook, coho, sockeye, kokanee, steelhead, other salmon and any unspecified salmon species   |
| Group 4          | Resident trout                                     | Rainbow, cutthroat, cutbow, bull, brook, lake, brown, other trout and any unspecified trout species.  |
| Group 5          | Other freshwater finfish or shellfish              | Lamprey, sturgeon, whitefish, sucker, bass, bluegill, carp, catfish, crappie, sunfish, tilapia, walleye, yellow perch, crayfish, freshwater clams or mussels, other freshwater finfish and any unspecified freshwater species |
| Group 6          | Marine finfish or shellfish                        | Cod, halibut, pollock, tuna, lobster, crab, marine clams or mussels, shrimp, other marine fish or shellfish   |
| Group 7          | Unspecified finfish or shellfish                   | Any response where the species was not specified sufficiently to be placed into Groups 3, 4, 5 or 6   |

Note: This list is a simplified version of Table 2 in the draft final report. The species lists are limited to the questionnaire species and groups (see Table 2 of this document) except where noted by an asterisk; \*A species which was "written in" in a text field of the questionnaire; these species were written in under the standard questionnaire category "Other marine fish or shellfish".

**Table 2.** Individual species and groups listed on the survey questionnaire.

| Salmon and Steelhead  Short Name Used in Data File                |                 |  |  |
|---|-----------------|--|--|
| Chinook (King) Salmon   | CHINOOK         |  |  |
| Coho (Silver) Salmon  | COHO            |  |  |
| ,   | SOCKEYE         |  |  |
| Sockeye (Red) Salmon  |                 |  |  |
| Kokanee (resident form of sockeye)                                | KOKANEE         |  |  |
| Steelhead (migratory form of rainbow trout)                       | STEELHEAD       |  |  |
| Other Salmon species (specify, e.g., Chum, Pink, Atlantic Salmon) | OTHER           |  |  |
| All salmon and steelhead / species not specified                  | ALL_UNSPECIFIED |  |  |
| Resident Trout  | DAINIDOW        |  |  |
| Rainbow Trout   | RAINBOW         |  |  |
| Cutthroat Trout   | CUTTHROAT       |  |  |
| Cutbow Trout (hybrid of Rainbow and Cutthroat Trout)              | CUTBOW          |  |  |
| Bull Trout (Dolly Varden)   | BULL            |  |  |
| Brook Trout   | BROOK           |  |  |
| Lake Trout  | LAKE            |  |  |
| Brown Trout   | BROWN           |  |  |
| Other trout (specify)   | OTHER           |  |  |
| All trout / species not specified                                 | ALL_UNSPECIFIED |  |  |
| Other Freshwater Fish and Shellfish                               |                 |  |  |
| Sturgeon  | STURGEON        |  |  |
| Lamprey   | LAMPREY         |  |  |
| Whitefish   | WHITEFISH       |  |  |
| Sucker  | SUCKER          |  |  |
| Burbot  | BURBOT          |  |  |
| Northern Pikeminnow (previously Squawfish)                        | PIKEMINNOW      |  |  |
| Bass  | BASS            |  |  |
| Bluegill  | BLUEGILL        |  |  |
| Carp  | CARP            |  |  |
| Catfish   | CATFISH         |  |  |
| Crappie   | CRAPPIE         |  |  |
| Sunfish   | SUNFISH         |  |  |
| Tilapia   | TILAPIA         |  |  |
| Walleye   | WALLEYE         |  |  |
| Yellow Perch  | PERCH           |  |  |
| Other freshwater finfish (specify)                                | OTHER FINFISH   |  |  |
| Crayfish  | CRAYFISH        |  |  |
| Freshwater Clams or Mussels                                       | CLAMS           |  |  |
| Unknown / unspecified freshwater fish                             | UNSPECIFIED     |  |  |
| Seafood / Marine Fish and Shellfish                               |                 |  |  |
| Cod   | COD             |  |  |
| Halibut   | HALIBUT         |  |  |
| Pollock   | POLLOCK         |  |  |
| Tuna  | TUNA            |  |  |
| Lobster   | LOBSTER         |  |  |
| Crab  | CRAB            |  |  |
| Marine Clams or Mussels   | CLAMS           |  |  |
| Shrimp  | SHRIMP          |  |  |
| Other marine fish or shellfish (specify)                          | OTHER           |  |  |
| Unspecified fish or shellfish species                             | UNSPECIFIED     |  |  |
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**Table 3.** All variables included in the data file, including consumption rates (g/day) for individual species and species groups listed on the survey questionnaire.

| Variable Name                  | Description   |
|--------------------------------|---|
| ID                             | 5-character unique identifier of respondent   |
| GENDER                         | Male or Female. Taken from the tribal enrollment file.  |
| AGE                            | 18-29, 30-39, 40-49, 50-60 or 60+. Taken from the tribal enrollment file.   |
| FISHER                         | 0 = not on fishers list; 1 = on fishers list. See the "Populations" section of the draft final report for a definition of 'fisher.'   |
| BODY_WT                        | Self-reported body weight in pounds (Q50 on questionnaire). Categorized as 100-150, 151-200, 201-250, 251+. The wide categories were chosen to protect the identities of the respondents. NA = respondent did not report weight.  |
| SURVEY_WT1                     | Final survey weights (adjusted for non-response) used for FFQ and demographic summaries in the draft final report. Use these weights for all new analyses.  |
| SURVEY_WT2                     | Survey weights (adjusted for non-response) used for NCI method summaries in the draft final report. These weights are intended for the user who wishes to reproduce the NCI method analysis presented in the draft final report.  |
| SURVEY_STRATA                  | Strata used to draw the original sample. The strata are a cross between gender and age. Strata designations for the Nez Perce Tribe: F18-29, F30-39, F40-49, F50-59, F60+, M18-29, M30-39, M40-49, M50-59 or M60+. Strata designations for the Shoshone-Bannock Tribes: Off, On 18-29, On 30-39, On 40-49, On 50-59, On 60+ or On Fishers list. |
| FFQ_GROUPX_GPD                 | FFQ consumption rate (grams/day) for species group X (X = 1 - 7, see Table 1). This includes consumption both at or outside of special events and gatherings.   |
| FFQ_EVENT_SALMON_STEELHEAD_GPD | FFQ consumption rate (grams/day) of salmon or steelhead at special events and gatherings only.  |
| FFQ_EVENT_TROUT_GPD            | FFQ consumption rate (grams/day) of resident trout at special events and gatherings only.   |

| Variable Name                           | Description   |
|---|---|
| FFQ_EVENT_STURGEON_GPD                  | FFQ consumption rate (grams/day) of sturgeon at special events and gatherings only.   |
| FFQ_EVENT_SUCKERS_WHITEFISH_GPD         | FFQ consumption rate (grams/day) of suckers and whitefish (combined) at special events and gatherings only.   |
| FFQ_NONEVENT_SALMON_XXXX_GPD            | FFQ consumption rate (grams/day) of salmon species XXXX <b>outside of</b> special events and gatherings (see Table 2 for species).  |
| FFQ_NONEVENT_STEELHEAD_GPD              | FFQ consumption rate (grams/day) of steelhead <b>outside</b> of special events and gatherings.  |
| FFQ_NONEVENT_SALMON_OTHER_GPD           | FFQ consumption rate (grams/day) of other salmon species not listed in Table 2, <b>outside of</b> special events and gatherings.  |
| FFQ_NONEVENT_SALMON_ALL_UNSPECIFIED_GPD | FFQ consumption rate (grams/day) of either an unspecified salmon species or all salmon species combined, <i>outside of</i> special events and gatherings (see Table 2).   |
| FFQ_NONEVENT_TROUT_XXXX_GPD             | FFQ consumption rate (grams/day) of resident trout species XXXX <i>outside of</i> special events and gatherings (see Table 2 for species). For this and subsequent variables, the 'XXXX' placeholder is replaced in the data file headers by the name of a species. |
| FFQ_NONEVENT_TROUT_OTHER_GPD            | FFQ consumption rate (grams/day) of other resident trout species not listed in Table 2, outside of special events and gatherings.   |
| FFQ_NONEVENT_TROUT_ALL_UNSPECIFIED_GPD  | FFQ consumption rate (grams/day) of either an unspecified resident trout species or all resident trout species combined, <b>outside of</b> special events and gatherings (see Table 2).   |
| FFQ_NONEVENT_FRESH_XXXX_GPD             | FFQ consumption rate (grams/day) of other freshwater species XXXX, besides salmon or trout, <i>outside of</i> special events and gatherings (see Table 2 for species).  |
| FFQ_NONEVENT_FRESH_OTHER_GPD            | FFQ consumption rate (grams/day) of other freshwater finfish species not listed in Table 2, <i>outside of</i> special events and gatherings.  |

| Variable Name                      | Description  |
|------------------------------------|--|
| FFQ_NONEVENT_FRESH_UNSPECIFIED_GPD | FFQ consumption rate (grams/day) of either an unspecified freshwater species, not salmon or trout, <i>outside of</i> special events and gatherings (see Table 2).                                    |
| FFQ_NONEVENT_MARINE_XXXX_GPD       | FFQ consumption rate (grams/day) of marine species XXXX <b>excluding</b> special events and gatherings (see Table 2 for species).  |
| FFQ_NONEVENT_MARINE_OTHER_GPD      | FFQ consumption rate (grams/day) of other marine finfish or shellfish species not listed in Table 2, <b>outside of</b> special events and gatherings.  |
| FFQ_NONEVENT_OTHER_UNSPECIFIED_GPD | FFQ consumption rate (grams/day) of unspecified species which could not be placed in any other group, <b>outside of</b> special events and gatherings (see Table 2).                                 |
| RECALL1_CONSUMED_YESTERDAY         | Did respondent consume fish the day before the first 24 hour recall; Yes or No.  |
| RECALL1_WEEKEND_YESTERDAY          | Was the day before the first 24 hour recall a weekend (Friday – Sunday)? 1 = Yes, 0 = No.  |
| RECALL1_GROUPX_GRAMS               | Grams consumed of group X (X = 1 - 7, see Table 1) on the first 24 hour recall. NA = respondent did not provide consumption information.   |
| RECALL1_XXXX_GRAMS                 | Grams consumed of species XXXX on the first 24 hour recall, where X is one of the species listed under the FFQ_NONEVENT_XXXX_GPD variables. NA = respondent did not provide consumption information. |
| RECALL2_CONSUMED_YESTERDAY         | Did respondent consume fish the day before the second 24 hour recall; Yes or No. NA = respondent did not complete a second 24 hour recall.   |
| RECALL2_WEEKEND_YESTERDAY          | Was the day before the second 24 hour recall a weekend (Friday – Sunday)? 1 = Yes, 0 = No. NA = respondent did not complete a second 24 hour recall.   |
| RECALL2_GROUPX_GRAMS               | Grams consumed of group X (X = 1 - 7, see Table 1) on the second 24 hour recall.   |

| Variable Name      | Description  |
|--------------------|--|
| RECALL2_XXXX_GRAMS | Grams consumed of species XXXX on the second 24 hour recall, where XXXX is one of the species listed under the FFQ_NONEVENT_XXXX_GPD variables. NA = respondent did not complete a second 24 hour recall.  |
| REP_WT1_XXXX       | Bootstrap replicate weights (XXXX = 1-1000) used to compute confident intervals for the FFQ consumption rates (see the "Confidence Intervals" section of the draft final report for details). Use these weights for all new analyses.  |
| REP_WT2_XXXX       | Bootstrap replicate weights (XXXX = 1-1000) used to compute confident intervals for the NCI method consumption rate (see the "Confidence Intervals" section of the draft final report for details). Only use these weights to reproduce the NCI method analysis presented in the draft final report. |